

In re Voss, 194 USPQ 267 (CCPA 1977)

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(CCPA)
194 USPQ 267

Decided June 23, 1977
No. 76-710
U.S. Court of Customs and Patent Appeals

Headnotes

NONE AVAILABLE

1. Patentability -- Anticipation -- Patents Foreign (§ 51.2215)

Examiner erred in using "delivre" date of French patent as "patent" date for Section 102(b) purposes.

2. Court of Customs and Patent Appeals -- Jurisdiction (§ 28.25)

Notice and Reasons of Appeal that does not specifically allege that Board of Appeals erred in failing to find it had authority to review Commissioner's action authorizing reopening of prosecution, but alleges that "Patent and Trademark Office erred in reopening prosecution" is sufficient to include finding of no jurisdiction by board, from whose decisions appeals lie to Court of Customs and Patent Appeals under 28 U.S.C. 1542 and 35 U.S.C. 141, giving Court of Customs and Patent Appeals jurisdiction to determine whether board properly found that it had no jurisdiction to review decision to reopen prosecution.

3. Board of Appeals -- Jurisdiction (§ 19.35)

Pleading and practice in Patent Office -- Rejections (§ 54.7)

Board of Appeals properly found that it had no jurisdiction to review examiner's decision to

reopen prosecution, which constituted neither rejection of claim, nor decision adverse to ultimate patentability of claim.

4. Applications for patent -- Continuing (§ 15.3)

Specification -- Reference to other disclosures (§ 62.5)

Right to have benefit of filing date of earlier application under Section 120 for subject matter claimed in later application because that subject matter is disclosed in earlier application to which "a specific reference" is made is not to be confused with incorporation by reference in application of matter elsewhere written down, for economy, amplification, or clarity of exposition, by means of incorporating statement clearly identifying subject matter that is incorporated and where it is to be found.

5. Applications for patent -- Continuing (§ 15.3)

Pleading and practice in Patent Office -- In general (§ 54.1)

Specification -- Sufficiency of disclosure (§ 62.7)

It is immaterial how parent application achieves compliance with 35 U.S.C. 112, first paragraph; for example, it is only required that specification describe invention sufficiently for those of ordinary skill in art to recognize that applicant invented subject matter he now claims; Patent and Trademark Office has initial burden of presenting evidence or reasons why those skilled in art would not recognize in specification description of invention defined by present claims.

6. Pleading and practice in Patent Office -- In general (§ 54.1)

Specification -- Sufficiency of disclosure (§ 62.7)

Mere lack of literal support in parent application is not enough to carry Patent and Trademark Office's initial burden of presenting evidence or reasons why those skilled in art would not recognize in specification description of invention defined by claims.

7. Construction of specification and claims -- By prior art (§ 22.20)

Court of Customs and Patent Appeals must look to art or technology to which subject matter pertains in determining meaning of "glass-ceramic material."

8. Construction of specification and claims -- By prior art (§ 22.20)

Pleading and practice in Patent Office -- In general (§ 54.1)

Specification -- Sufficiency of disclosure (§ 62.7)

"Glass ceramic material" with crystal content of 20-100% would necessarily describe range 50% - 100% crystal content, unless broad range pertained to different invention from that involving narrower range; Patent and Trademark Office can rely on later-issued patents and publications only if showing is made that claim language is "language of the present art" as of filing date of application in question.

Particular patents -- Glass-Ceramic Article

Voss, Glass-Ceramic Article and Method, rejection of claims 3, 4, 5, 7, and 8 reversed.

Case History and Disposition:

Appeal from Patent and Trademark Office Board of Appeals.

Application for patent of Raymond O. Voss, Serial No. 785,635, filed Dec. 18, 1968, continuation-in-part of application, Serial No. 365,117, filed May 4, 1964. From decision rejecting claims 3, 4, 5, 7, and 8, applicant appeals. Reversed.

Attorneys:

Clinton S. Janes, Jr., Corning, N.Y., for appellant.

Joseph F. Nakamura (Fred E. McKelvey and Jere W. Sears, of counsel) for Commissioner of Patents and Trademarks.

Judge:

Before Markey, Chief Judge, Rich, Baldwin, and Miller, Associate Judges, and Scovel

Richardson, Associate Judge, United States Customs Court.

Opinion Text

Opinion By:

Miller, Judge.

This appeal is from the decision of the Patent and Trademark Office ("PTO") Board of Appeals ("board"), adhered to on reconsideration, sustaining the examiner's rejection of claims 3, 4, 5, 7, and 8 under 35 USC 102(b), in application serial No. 784,635, filed December 18, 1968, for "Glass-Ceramic Article and Method." ¹ We reverse.

The Invention

Glass-ceramic articles are produced through controlled heat treatment and crystallization of glass articles which contain nucleating agents. Appellant's invention starts with such a glass-ceramic article, containing a beta-spodumene ² as the predominant crystal phase, and then strengthens it through an ion-exchange process. The glass-ceramic article is immersed in a molten sodium salt bath for a time and at a temperature sufficient to permit the relatively large sodium cations to exchange with relatively smaller lithium cations, thereby effecting compressive stresses in the surface layer of the article and achieving an increase in the strength of the article.

Claims 4 and 7 are representative of the claimed subject matter and are reproduced below.

4. A unitary glass-ceramic article of high strenght [sic] *wherein the crystal content thereof constitutes at least 50% by weight of the article* with a surface compressive stress layer and an interior portion consisting essentially of Li₂O, Al₂O₃, and SiO₂ wherein the crystals of said interior portion consist essentially of beta-spodumene solid solution and the crystals of said surface compressive stress layer consist essentially of beta-spodumene solid solution, the crystal structure of said latter crystals being essentially unchanged but in at least a portion of which the proportion of lithium ions is less with a corresponding increase in an amount of sodium ions.

7. A method for making a unitary glass-ceramic article of high strenght [sic] *wherein the crystal content thereof constitutes at least 50% by weight of the article* with a surface compressive stress layer and an interior portion which comprises contacting a glass-ceramic article consisting essentially of Li₂O, Al₂O₃ and SiO₂ wherein the crystal phase therein consists essentially of beta-spodumene solid solution, at a temperature above 200°C. with a source of exchangeable sodium ions for a period of time sufficient to replace at least part of the lithium ions of said beta-spodumene solid solution in a surface layer of the arti

cle with a corresponding amount of sodium ions, said replacement not changing the essential crystal structure of the beta-spodumene solid solution crystals but thereby effecting a compressively stressed surface layer on the article. [Underscored matter represents the limitation in issue.]

The Prior Art

[1]The reference relied upon by the board was:

Table set at this point is not available. See table in hard copy or call BNA PLUS at 1-800-452-7773 or 202-452-4323.³

The French patent appears to be based on a number of United States applications commonly assigned to Corning Glass Works. Among them is serial No. 365,117, of which the present application is a continuation-in-part.

The Rejection

This application was previously before this court in appeal No. 74-527. While that appeal was pending, the Commissioner requested that the application be remanded for the board to reverse the sole ground of its rejection in light of our decision reversing the board on a similar rejection in a commonly-assigned application. ⁴ The motion for remand was granted, the board reversed the sole ground of rejection, and the application was returned to the examiner. The examiner then, pursuant to 37 CFR 1.198, reopened prosecution and applied the French patent against all claims under 35 USC 102(b). The examiner's position was that the limitation in the claims, "wherein the crystal content thereof constitutes at least 50% by weight," was not described in appellant's parent application, as required by the first paragraph of 35 USC 112. Thus, appellant was denied the benefit of the filing date of his parent application under 35 USC 120, rendering the French patent available as a reference under section 102(b). ⁵

Before the board, appellant argued that the reopening of prosecution by the examiner was improper ⁶ and that the passage, quoted below, from his parent application directed the person of ordinary skill in the art to United States patent No. 2,920,971 ("Stookey ;971") for a description of glass-ceramic articles which appellant deemed operable in his invention.

A glass-ceramic material is originally formed as a glass which is then phase separated, by a controlled uniform devitrification throughout, to develop a fine crystalline structure within a glassy matrix, the material thus produced having physical properties materially different from the parent glass and more nearly characteristic of a conventional crystalline ceramic material. Reference is made to United States Patent No. 2,920,971, granted to S. D. Stookey, for a general discussion of glass-ceramic materials and their production.

The board found that it had no jurisdiction to review the Commissioner's grant of authority for the examiner to reopen prosecution. It further found that the "mere reference" to the Stookey

'971 patent in the parent application was "not sufficient to incorporate by reference into the parent application any portions of the Stookey patent," citing *In re de Seversky*, 474 F.2d 671, 177 USPQ 144 (CCPA 1973). Having thus determined that the parent application did not contain an antecedent basis for the disputed limitation in the claims, the board concluded that the present application was not entitled to the benefit of the parent application filing date and affirmed the rejection based on the French patent.

Opinion

Propriety of Reopening Prosecution

[2]Appellant renews his contention that the PTO improperly reopened prosecution. We note that appellant, in his Notice and Reasons of Appeal to this court, does not specifically allege that the *board* erred in fail

Page 270

ing to find that it had authority to review the Commissioner's action authorizing reopening of prosecution; rather, he alleges that the "Patent and Trademark Office erred in re-opening prosecution," an allegation sufficient to include the finding of no jurisdiction by the board, from whose decisions appeals lie to this court under 28 USC 1542 ⁷ and 35 USC 141. ⁸ Accordingly, this court has jurisdiction to determine whether the board properly found that it had no jurisdiction to review the decision to reopen prosecution. In *re Haas*, 486 F.2d 1053, 179 USPQ 623 (CCPA 1973).

[3]This court has held that jurisdiction under 35 USC 141 is dependent upon the jurisdiction of the board under 35 USC 7, ⁹ viewed in light of 35 USC 134. ¹⁰ In *re Dollinger*, 474 F.2d 1027, 177 USPQ 201 (CCPA 1973). The examiner's decision to reopen prosecution constituted neither the rejection of a claim nor a decision adverse to the ultimate patentability of a claim. Accordingly, we hold that the board properly found that it had no jurisdiction to review the decision to reopen prosecution. ¹¹

The Incorporation-by-Reference Issue

[4]It is apparent that the board misinterpreted this court's decision in *In re de Seversky*, *supra*, by confusing two different concepts described therein as follows:

(1) the right to have the benefit of the filing date of an earlier application under §120 for subject matter claimed in a later application because that subject matter is *disclosed in an earlier application* to which "a specific reference" is made -- i.e., a reference to the earlier application per se, and (2) the incorporation *by reference* in an application of matter elsewhere written down (not necessarily in a patent application), for economy, amplification, or clarity of exposition, by means of an incorporating statement clearly identifying the subject matter which is incorporated and where it is to be found. [474 F.2d

at 674, 177 USPQ at 146. Emphasis in original.]

Appellant is not relying on his parent application's reference to Stookey '971 to give him an earlier effective filing date as in (1), but to incorporate a discussion of glass-ceramic articles and methods of preparing them as in (2).¹² Glass-ceramic materials are merely starting materials for appellant's strengthening process. Rather than include in his application a detailed discussion of how to prepare such known starting materials, appellant, for economy, referred the skilled artisan to Stookey '971. It is clear that appellant intended the "discussion of glass-ceramic materials and their production" in Stookey '971 to become part of his parent application. See *In re Lund*, 54 CCPA 1361, 1370, 376 F.2d 982, 989, 153 USPQ 625, 631 (1967). The board erred in finding otherwise. Glass-ceramic materials are merely starting materials for appellant's strengthening

Page 271

process. Rather than include in his application a detailed discussion of how to prepare such known starting materials, appellant, for economy, referred the skilled artisan to Stookey '971. It is clear that appellant intended the "discussion of glass-ceramic materials and their production" in Stookey '971 to become part of his parent application. See *In re Lund*, 54 CCPA 1361, 1370, 376 F.2d 982, 989, 153 USPQ 625, 631 (1967). The board erred in finding otherwise.

The Description Requirement Issue

[5]Turning to the merits of the rejection, the PTO can rely on the French patent as a reference against the involved claims only if appellant's parent application does not comply with 35 USC 112, first paragraph with respect to those claims. How the application of the parent achieves compliance is immaterial. In *re Smith*, 481 F.2d 910, 178 USPQ 620 (CCPA 1973). It is only required, for example, that the specification describe the invention sufficiently for those of ordinary skill in the art to recognize that the applicant invented the subject matter he now claims. In *re Smythe*, 480 F.2d 1376, 1382, 178 USPQ 279, 284 (CCPA 1973). The PTO has the initial burden of presenting evidence or reasons why those skilled in the art would not recognize in the specification a description of the invention defined by the present claims. In *re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976).

[6]As correctly pointed out by the Solicitor, the expression "at least 50%" crystal content does not literally appear in appellant's parent application. However, mere lack of literal support is not enough to carry the PTO's initial burden. In *re Wertheim*, *supra* at 265, 191 USPQ at 98. Nor is this a situation where the claims read on embodiments outside the scope of the description.¹³ Appellant's parent application describes the invention in terms broader than those in the claims, for example:

I have further found that a glass-ceramic material containing a lithium-aluminum-silicate crystal phase identified as beta-spodumene can be strengthened to a remarkable degree by ion exchange resulting from thermochemical treatment. Strangely enough, however, this strengthening capability is of a selective nature, that is peculiar to, and uniquely associated with, certain crystals or crystal structure. Thus, it has

been found that a glass-ceramic containing a metastable beta-eucryptite crystal phase is not strengthened by such ion exchange whereas the same material after thermal conversion of the crystal phase to the beta-spodumene form is readily strengthened.

The term "beta-spodumene" has been used to designate a crystal that is now known to be in the * * * tetragonal system. * * *

* * * the basic considerations for strengthening of this type of glass-ceramic material appear to be the presence of an exchangeable ion (lithium) in the crystal, a crystal in the tetragonal system, and a fine grain size crystal characteristic of well-developed glass-ceramic materials.

It is apparent that appellant contemplated that his invention resided in the use of a well-developed glass-ceramic material having beta-spodumene as the crystal phase to enable strengthening of the material by his ion exchange process. The claims on appeal add only the further recitation that such glass-ceramic materials must have a crystal content of "at least 50% by weight."

[7]Appellant urges that this 50% limitation merely quantifies the percentage crystal content inherent in use of the term "glass-ceramic material." In determining the meaning of that expression, as used in the context of the present application, we must look to the art or technology to which the subject matter pertains. In *re Salem*, 553 F.2d 616, 193 USPQ 513 (CCPA 1977). In this case, appellant has incorporated the Stookey '971 discussion of "glass-ceramic materials" into his application. He also points to the fact that, in litigation involving Stookey '971, the District Court for the District of Delaware made findings of fact, subsequently approved by the Third Circuit Court of Appeals, in *Corning Glass Works v. Anchor Hocking Glass Corp.*, 253 F.Supp. 461, 149 USPQ 99 (D. Del. 1966), modified, 374 F.2d 473, 153 USPQ 1 (CA 3 1967), substantially as follows:

(1) the change in properties in a glass ceramic begins at approximately 40% crystallinity and in most cases is complete at 60% crystallinity, (2) the 50% crystallinity limitation found in all claims of the Stookey '971 patent must be read in light of the patent's overall purpose to

Page 272

convert preformed glass articles to predominantly crystalline bodies with substantially crystalline properties, and (3) at the time the Stookey invention was made it was possible to only roughly determine the percent crystallinity of a glass-ceramic material. Such findings are strongly probative of what one of ordinary skill in the art, at the time appellant's invention was made, would have understood to be the meaning of the term "glass-ceramic material."

[8]The PTO cites another Stookey patent (No. 3,157,522) to show that glass-ceramic materials can have as low as a 20% crystal content. However, this patent is not available as

evidence, because its issue date is after the filing date of appellant's parent application and, further, it does not purport to teach that the information was publicly known as of the filing date of appellant's parent application. ¹⁴ See *In re Gunn*, 537 F.2d 1123, 190 USPQ 402 (CCPA 1976); *In re Glass*, 492 F.2d 1228, 181 USPQ 31 (CCPA 1974). ¹⁵

The Solicitor's argument that Stookey '971 describes glass-ceramics having crystal contents as low as 25% is not persuasive in view of the claims and "overall purpose" of Stookey '971. *Corning Glass Works v. Anchor Hocking Glass Corp.*, *supra*.

On this record, we conclude that the "at least 50%" limitation in appellant's claims merely quantifies the percentage crystallinity one of ordinary skill in the art *at that time* would have attributed to the term "glass-ceramic material."

The Solicitor's other arguments appear to question whether Stookey '971 shows examples of glass-ceramic materials suitable for use in appellant's invention. However, appellant need not rely on Stookey '971 for such examples. His parent application, in Examples I, III, and IV, shows strengthened glass-ceramic materials having at least 50% by weight crystalline beta-spodumene content. ¹⁶ Also, we note that the PTO has not questioned that the present application complies with the requirements of 35 USC 112, first paragraph.

In view of all the foregoing, we hold that appellant's parent application complies with the requirements of 35 USC 112, first paragraph and that appellant is entitled to his filing date under 35 USC 120.

The decision of the board is reversed.

Footnotes

Footnote 1. This application is a continuation-in-part of application serial No. 365,117, filed May 4, 1964, and now abandoned.

Footnote 2. Beta-spodumene is a crystal in the trapezohedral class of the tetragonal system having the formula $\text{Li}_2\text{O} \cdot \text{Al}_2\text{O}_3 \cdot 4\text{SiO}_2$. It is formed by heating alpha-spodumene on the order of 700°C.

Footnote 3. The record does not disclose the specific date of publication, although the face of the patent indicates publication during 1966. The examiner erred in using the "delivre" date as the "patent" date for section 102(b) purposes. *In re Ekenstam*, 45 CCPA 1022, 256 F.2d 321, 118 USPQ 349 (1958). See Manual of Patent Examining Procedure §901.05(b), at 140 (April, 1976). The error was harmless, however, since the patent was available to the public more than one year prior to appellant's actual filing date.

Footnote 4. *In re Ackerman*, No. 9123 (CCPA Jan. 17, 1974) (unpublished opinion), 180 USPQ

IV .

Footnote 5. Appellant has not denied that at least Example 1 of the French patent shows an embodiment of the presently claimed subject matter.

Footnote 6. It does not appear from the record that appellant ever petitioned the Commissioner with respect to the decision to reopen prosecution.

Footnote 7.

28 USC 1542 in pertinent part reads:

The Court of Customs and Patent Appeals shall have jurisdiction of appeals from decisions of:

(1) the Board of Appeals and the Board of Interference Examiners of the Patent Office as to patent applications and interferences. * * *

Footnote 8.

35 USC 141 in pertinent part reads:

An applicant dissatisfied with the decision of the Board of Appeals may appeal to the United States Court of Customs and Patent Appeals. * * *

Footnote 9.

35 USC 7 in pertinent part reads:

The examiners-in-chief shall be persons of competent legal knowledge and scientific ability. * * * The Commissioner, the deputy commissioner, the assistant commissioners, and the examiners-in-chief shall constitute a Board of Appeals, which, on written appeal of the applicant, shall review adverse decisions of examiners upon applications for patents.

Footnote 10.

35 USC 134 in pertinent part reads:

An applicant for a patent, any of whose claims has been twice rejected, may appeal from the decision of the primary examiner to the Board of Appeals. * * *

Footnote 11. This court rendered no decision in previous appeal No. 74-527. Even if the decision of the board had been reversed, this court has consistently held that such reversal is not a mandate to the PTO to issue a patent and does not preclude the PTO from reopening prosecution. See, e.g., *In re Borkowski*, 505 F.2d 713, 184 USPQ 29 (CCPA 1974), *In re Arkley*, 59 CCPA 804, 810, 455 F.2d 586, 589, 172 USPQ 524, 527 (1972), and *In re Fisher*, 58 CCPA

1419, 448 F.2d 1406, 171 USPQ 292 (1971).

Footnote 12. Compare the incorporating language quoted, *supra*, in the parent application with the language in *In re Hughes*, 550 F.2d 1273, 193 USPQ 141 (CCPA 1977), where a statement, "*Reference is made to application Ser. No. 131,108 for complete descriptions of methods of preparing aqueous polymeric dispersions applicable in the hereinafter described invention,*" was held to incorporate the disclosure of such methods into the patent in question.

Footnote 13. See the treatment of claims 1 and 4 in *In re Wertheim*, *supra* at 263-64, 191 USPQ at 97-98.

Footnote 14. Even if we were to assume that the term "glass-ceramic material" encompassed materials with a crystal content as low as 20% by weight, description of the range 20-100% (100% being the theoretical upper limit of crystallinity) would necessarily describe the range 50%-100% crystal content now claimed unless the broad range pertained to a different invention from that involving the narrower range. *In re Wertheim*, *supra* at 264-65, 191 USPQ at 98. The portions of appellant's parent application, quoted *supra*, indicate no criticality in the percentage crystallinity utilized in the practice of the invention, merely stating that the glass-ceramic material have physical properties "more nearly characteristic of a conventional crystalline ceramic material," citing Stookey '971.

Footnote 15. We note the dictum in footnote 6 of *Glass*, *id.* at 1232, 181 USPQ at 34, indicating that later-issued patents or publications may be used to construe claim language. However, it is clear from the quotation from *In re Fisher*, 57 CCPA 1099, 1106, 427 F.2d 833, 838, 166 USPQ 18, 23 (1970), set forth in the footnote that the PTO can rely on such later-issued patents and publications only if a showing is made that such claim language is the "language of the present art" as of the filing date of the application in question. The PTO has made no such showing in this case.

Footnote 16. Compare identical Examples I, III, and IV in the present application in which X-ray diffraction analysis was performed and percentages determined. The examples in the parent application, of course, would have inherently possessed the same properties. See *Crome v. Morrogh*, 44 CCPA 704, 239 F.2d 390, 112 USPQ 49 (1956).

- End of Case -